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a stone about six feet in length by four and a half in breadth, which many years ago was cast from its level position by the lovers of destruction and mischief. A few years ago, on removing some large stones on the east side, whitish ashes were found underneath, and amongst these were numerous particles of a dead white colour, which fell into dust on their being exposed to the air.—These particles were supposed to have been bones in their last stage of decay.

The original names of these stones has fortunately been less corrupted than those of numerous other relics of antiquity; from which circumstance we may fairly conclude, that such monuments were temples of the sun.—*Cean grioth,* from which the present name is evidently derived, literally signifies *the head of the sun,* the worship of which great luminary being prior to the introduction of Christianity into this kingdom, the great object of pagan adoration.*

At some distance is a hill encompassed by an earthen embankment and a trench, in digging within which there have been found stone hatchets, with spear and arrow heads made of flint. These last are called *elf stones,* and are generally believed to have been discharged by fairies at cattle, against whose power charms are still used by the credulous. A little northward are two rows of large grey stones standing upright; the rows are about sixteen inches asunder, and a few inches between each stone. In an adjoining field are several caves, believed to have been the winter habitations of the ancient inhabitants of the country, who were called *Pehts* (Picks.)

Carrickfergus. S. M'S.

SIMPLE SCIENCE—SILVER.

Silver was in very early use amongst the ancients; the first notice of it we find in Genesis xxiii. 16, where "Abraham weighed to Ephron, in the audience of the sons of Seth, four hundred shekels of silver." This was 1800 years before Christ, and eleven hundred before the foundation of Rome. Pliny says, such was the luxury of the Romans, that it was simply reckoned a piece of *elegance* (not extravagance) to consume in the ornaments of coaches and the trappings of horses, metals, which their ancestors could not use, even in drinking vessels, without being astonished at their own prodigality. Nero and his wife shod their favorite horses with gold and silver. Silver was formerly of more value when compared with gold than it is at present; Herodotus tells us that in his time, the relative value of gold and silver in Greece and Persia was 13 to 1. Plato, who flourished fifty years after him, says the value of gold in Greece was to that of silver as 12 to 1; and Meander, who wrote about three hundred years after Christ, estimates the value of gold to silver as 10 to 1. Calculating from the current coin of Great Britain, the value of gold is now rather more than fifteen times that of silver. It is generally supposed, that when metal was first employed as an instrument of barter, those who wished to purchase goods carried a mass of it about with them from place to place, and provided themselves with instruments to cut off a sufficient quantity for their purpose; but they soon felt the necessity of having pieces ready cut and weighed; and as knowledge increased, men found a way of enriching themselves by amalgamating silver and gold with less precious metals; and it is probable that to prevent frauds of this kind the rulers of different states placed their stamps on these pieces of metal to attest their purity.

Silver is about ten times as heavy as water; and is found either in a native state—as ore—or combined with other metals; and is chiefly brought from Mexico and Peru, though it is found in every quarter of the globe. The silver mines of Mexico and Peru far exceed in value the whole of the European and Asiatic mines; for we are told by Humboldt, that in the space of three centuries they afforded 316,023,883 pounds troy of pure silver: and he remarks that this quantity would form a solid globe of silver 91,203 feet in diameter. Mr. Helms is of opinion that the Andes if properly examined would afford silver enough to overturn our present commercial system, by making silver as common as copper. Notwithstanding the immense quantities which have already been extracted from these mines, they still continue to repay the miners' toil; but instead of finding the ore near the surface as formerly, the workmen are obliged to descend to prodigious depths to obtain it So poisonous are the exhalations which arise from them, that the cattle grazing on the outside are affected by their pernicious fumes, and many thousands of indians have perished in them; nevertheless, such is the effect of avarice, that prodigious numbers of them are still sacrificed year after year. Although the exhalation of the mines are so poisonous, silver is thought the most wholesome of all the metals, and therefore forks and spoons are made of it. Native silver is mostly found in the mines of Potosi; though some of it has been lately found in a copper mine in Cornwall. In the Museum of the Academy of Science at Petersburgh, there is a piece of native silver from China, of such fineness, that coins have been struck from it without its having been passed through the crucible. Silver has been found in many parts of the United Kingdoms; in Aberistwith a mint was established in the year 1637 for coining *Welsh* silver: and by the silver produced in his lead mine in Cardiganshire, Sir Hugh Middleton is said to have cleared £2000 pounds per month, and thus was enabled to bring the new river from Ware to London, by which a great part of the inhabitants of that Metropolis is supplied with water. In the County of Antrim there is a mine so rich, that every thirty pounds of lead ore is said to produce one pound of silver. Silver is the most brilliant metal we have, nothing surpasses its splendour except steel when highly polished; it possesses more hardness than gold, tin, or lead, but is softer than iron, platinum, or copper. In ductility it is next to gold, fifty square inches of silver leaf weighing not more than a grain; and the silver wire used by astronomers being no more than half the thickness of a fine human hair. Gold thread is only silver wire gilt: an ingot of silver, usually about thirty pounds weight, is made into a roll an inch and a half in diameter, and about twenty-two inches long. From one to two ounces of gold leaf are sufficient to cover this cylinder: but this thin coat of gold must be yet vastly thinner; the ingot is repeatedly drawn through holes of the several irons, each smaller than the other, till it be finer than a hair, every new hole diminishes its thickness, but what it loses in circumference it gains in length, and consequently increases in surface, yet the gold still covers it. How great must be the ductility of both the gold and silver, when the latter is drawn by this process into a thread nine hundred times less than it was at first, and the gold still covers it. Silver readily combines with sulphur; Mr. Hatchett says those who rob the public by diminishing the current silver coin, expose the coin to the fumes of burning sulphur, by which a black crust of combined sulphur and silver is formed, which by a smart blow comes off like a scale leaving the coin so little affected, that the operation may sometimes be repeated twice or thrice without much hazard of detection.

Silver is, like gold, a *perfect* metal—that is, it is not volatilized by heat, some of it having been kept in a glass-house furnace two months, with a diminution of only one twelfth in weight; it has, however, been proved, that if heated in a stream of oxygen gas the whole may be volatilized. All the *imperfect* metals may be either volatalized or reduced to a calx by heat, and thus is virtue spoken of as "gold or silver tried in the furnace." Silver is used chiefly for domestic utensils and current coin, but for these purposes it is generally alloyed with copper, without which it would not have sufficient hardness to sustain much wear. Our standard silver is formed of about thirty-seven parts pure silver and three parts copper; and one pound of standard silver is coined into sixty-two shillings. The indelible marking ink, usually sold by druggists, is composed of silver and nitric acid; and the lunar caustic, which is the most active escharotic known, is also prepared from silver. There is likewise an article called fulminating silver procured from it, of so dangerous a character, that a minute quantity only can be made at a time with safety, and even that could not be removed to a phial without the utmost risk of shattering the glass into ten thousand pieces. E. B.

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* See Ware's Antiquities, vol. i., p 122.